Insights from a Study of the Grameen Approach to Extending Telecommunications Access to Marginal Customers

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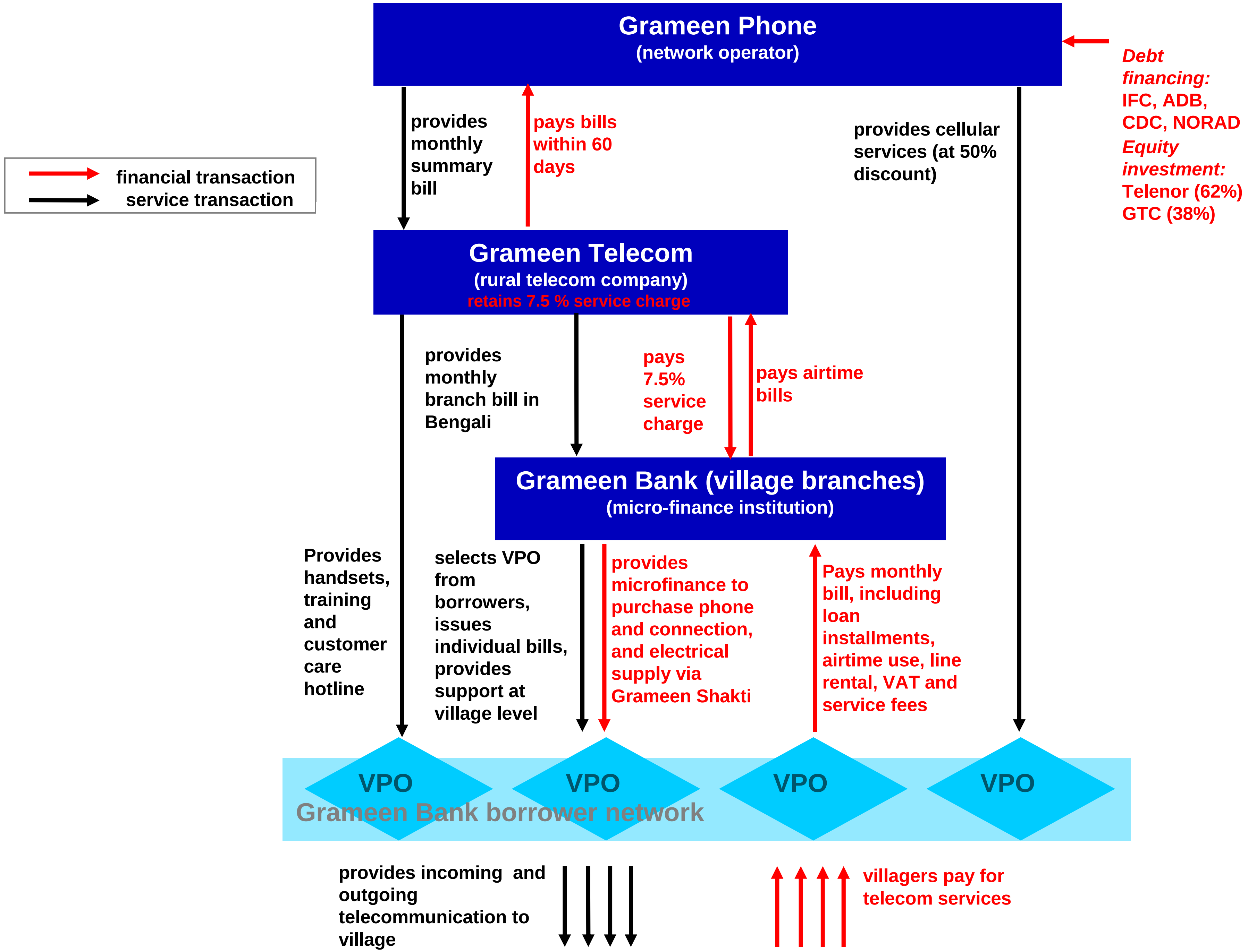
Research questions in context

- Emergence of innovative solutions to network development (WDR Theme for 2004/2005: *Diversifying Participation in Network Development)*
- "Grameen" approach as an example
  - Unbundling the model: incentives to innovate & design/organizational factors contributing to success
  - Replication in the context of changing/different markets, technologies & regulatory policies

The Village Phone program in brief…

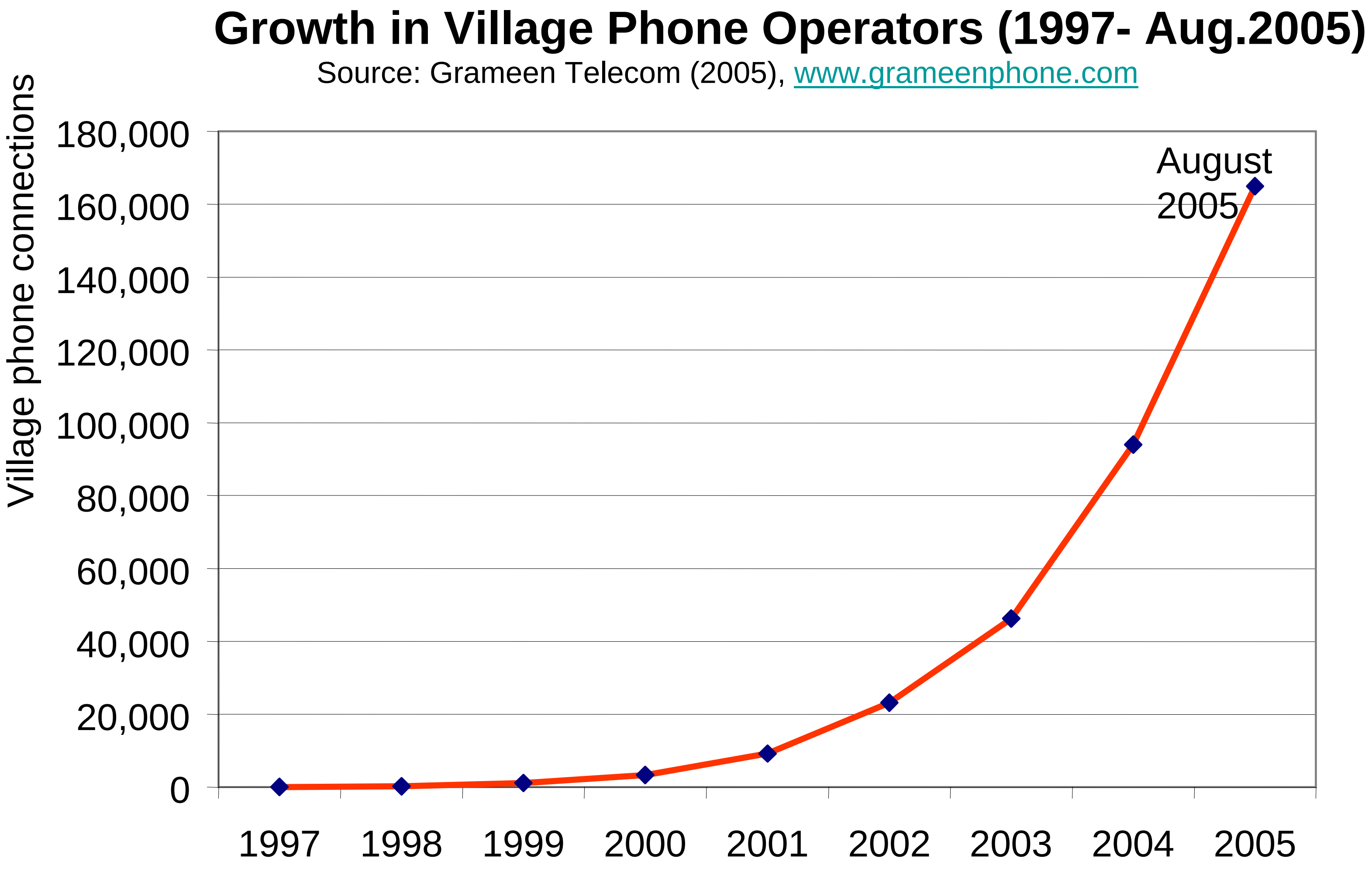
- **Grameen Bank** - MFI
  - selects new VPOs from borrower pool; provides borrower with USD133 loan to buy a cellular phone with GrameenPhone network; manages VP program at village level; (service fee: 7.5%)
- **GrameenPhone** – MNO (for profit company)
  - owns & operates network; provides airtime at 50% discount; issues single bill to VP program
- **Grameen Telecom Company** - rural telecom company (not for profit)
  - sells handset to VPO; provides training; translates and issues bills to GB branches; (service fee: 7.5%); (38% shareholder in GP)
- **Village Phone operators** – local resellers (selected GB clients)
  - resell telecom services to fellow villagers


Grameen Phone
(network operator)
Debt financing:
IFC, ADB, CDC, NORAD
Equity investment:
Telenor (62%)
GTC (38%)
financial transaction
service transaction
provides monthly summary bill
pays bills within 60 days
provides cellular services (at 50% discount)
Grameen Telecom
(rural telecom company)
retains 7.5 % service charge
provides monthly branch bill in Bengali
pays 7.5% service charge
pays airtime bills
Grameen Bank (village branches)
(micro-finance institution)
Provides handsets, training and customer care hotline
selects VPO from borrowers, issues individual bills, provides support at village level
provides microfinance to purchase phone and connection, and electrical supply via Grameen Shakti
Pays monthly bill, including loan installments, airtime use, line rental, VAT and service fees
VPO
VPO
VPO
VPO
Grameen Bank borrower network
provides incoming and outgoing telecommunication to village
villagers pay for telecom services

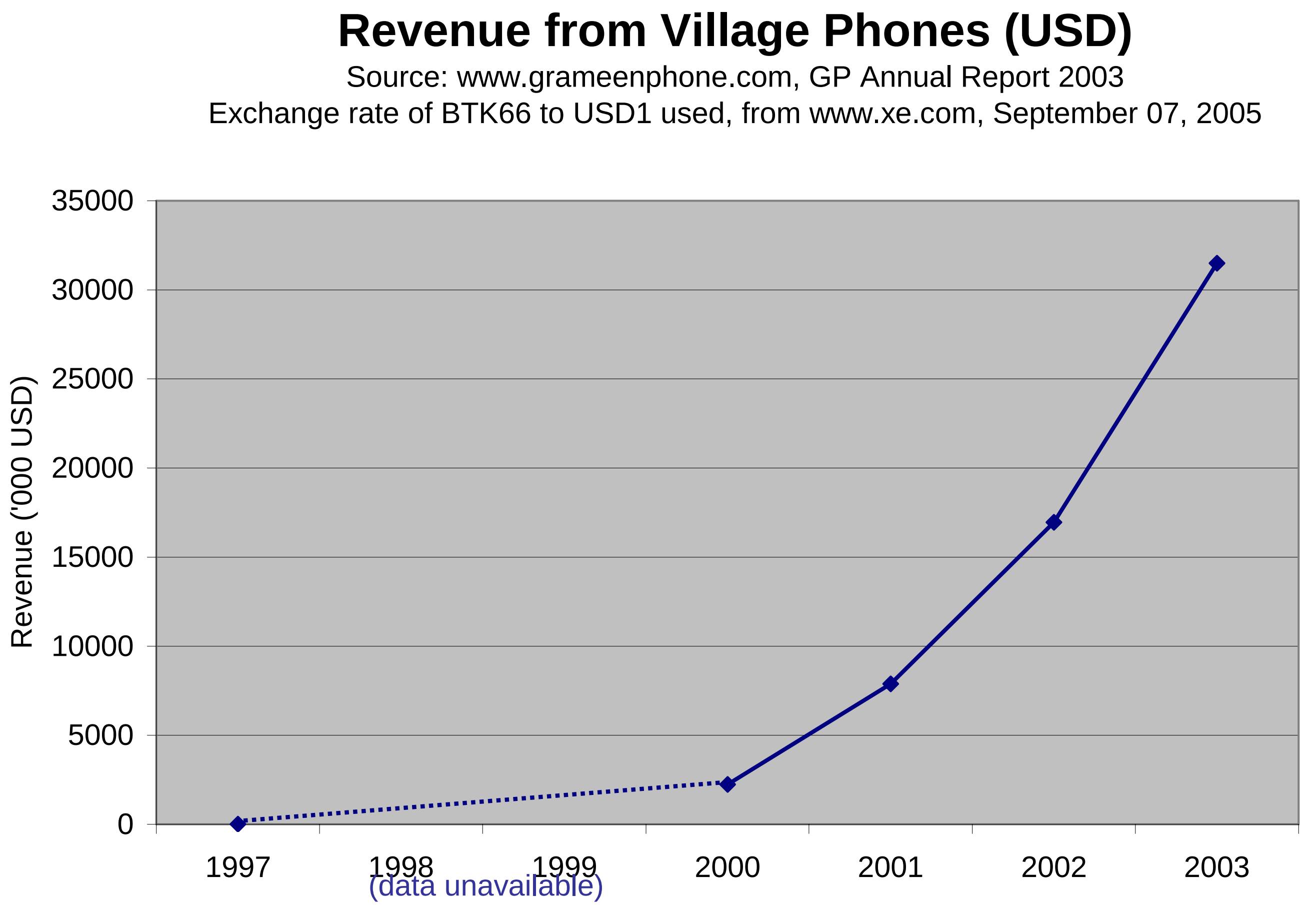
A ‘win-win’ outcome for all

- GP earns revenue from volume sales to VP program; 16% of GP’s revenues come from 4% of its customers – the VPOs; CSR profile is enhanced
- GTC extends rural telecom, covers costs (% on airtime revenue+ share dividends)
- GB gets loan income + % on airtime sales; promotes poverty alleviation
- VPOs earn income via viable business; recognition, empowerment, etc.
- Previously unserved rural villages are served; save on travel time and cost

Rapid growth in village phones



Revenue from VPs



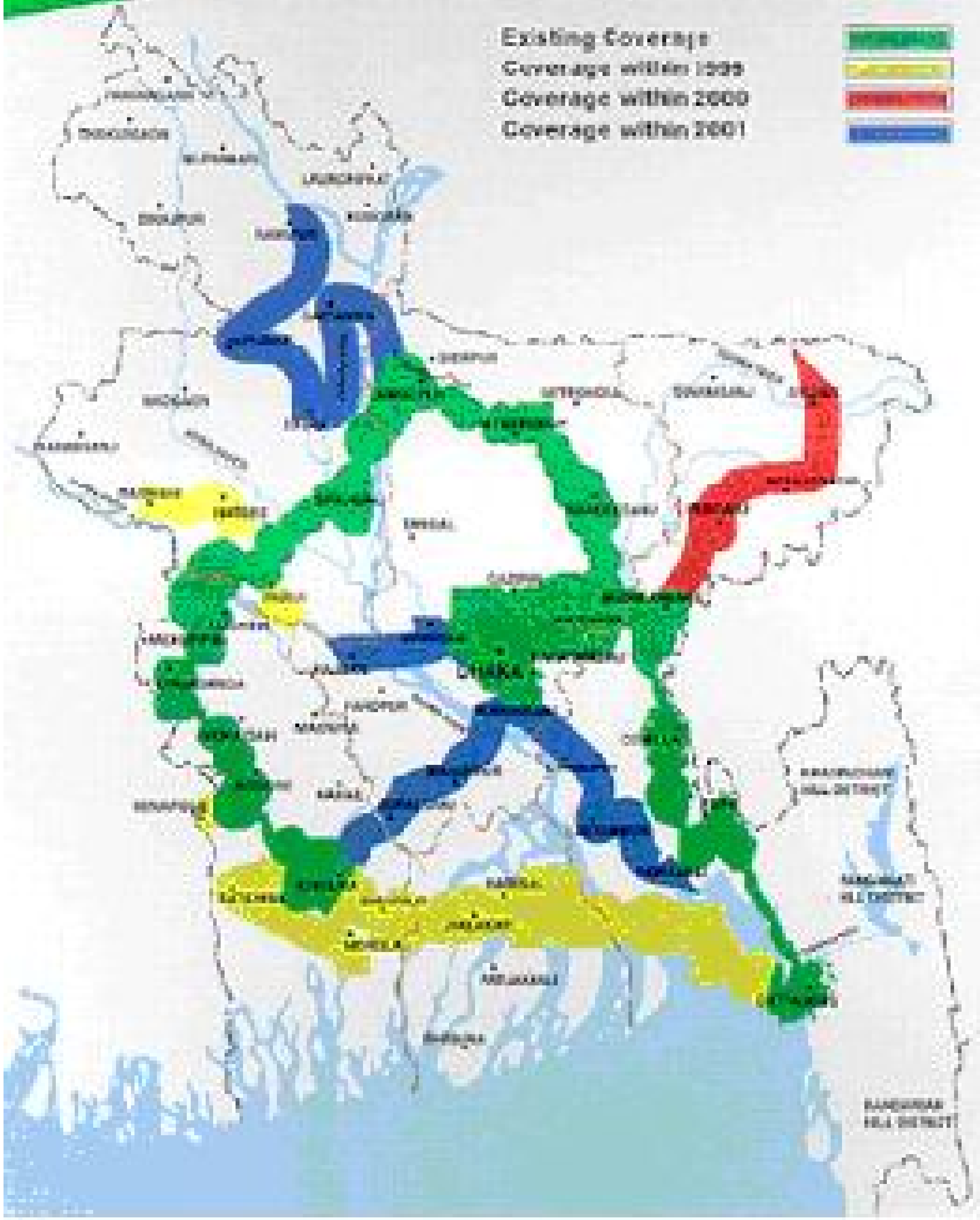
How did Grameen achieve this?

❑ Incentives to innovate

- Informed perception of marginal customers as a source of profit, based on GB’s years of experience with microfinance

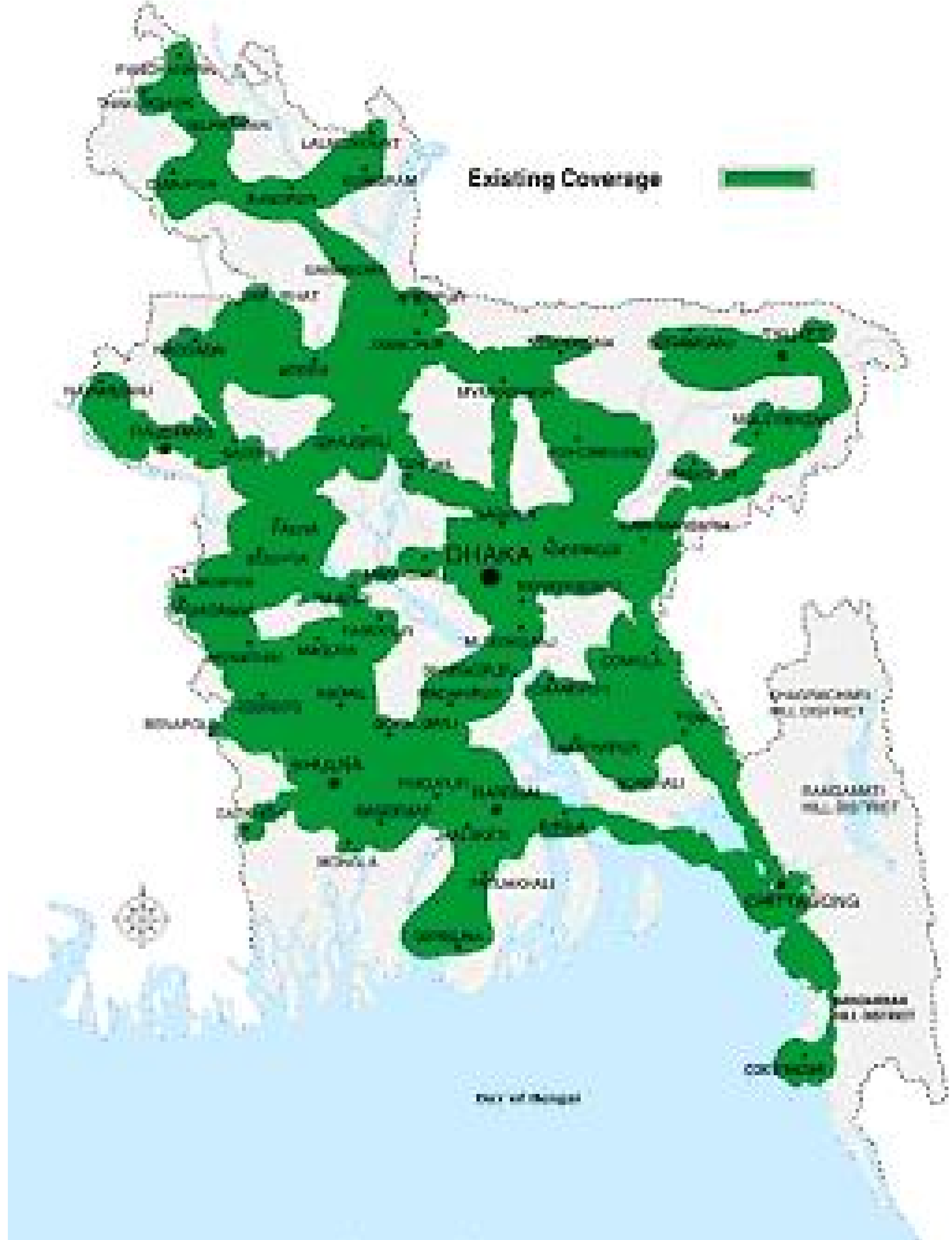
- Access to nation-wide backbone infrastructure with the acquisition of a 1800 km long fiber optic network from Bangladesh Railway

- 1998


Existing Coverage
Coverage within 1999
Coverage within 2000
Coverage within 2001
DHAKA

2001

2004



2005

N.B: Approximate coverage plan not on scale & is subject to change without notice.

How did Grameen achieve this?

❑ Design/organizational features

- "Grameen" brand image ensured buy-in of VPOs and made it difficult for competitors to make in-roads
- Reduced risk of non-payment: "power" relationship between GB and the borrowers- defaulters run the risk of jeopardizing their reputation in the community/ losing chance of obtaining future loans
- Structuring of costs – GP treats VP as a single customer; reduces billing costs
- "Rod vs. fish" model boosts sustainability and repayment
- Discounted airtime (50%)

Why have other operators in Bangladesh not replicated this model?

- GP has exclusive access to 1800km of fiber optic network along railway lines
- Grameen has a unique brand image (ensures ‘buy-in’ of VPOs; hard to compete with)
- BUT: current context could see replications/modified applications of this approach
  - Large investment flows from global telecom companies into domestic companies since late 2004
  - New interconnection deals being signed with incumbent
  - Falling costs of handsets

Replication in the context of different market, regulatory and technological conditions

Element of model	**Necessary condition?**
Infrastructure coverage	YES
Airtime discount	YES
Micro-finance for start-up of VPO business	NO; handset costs are falling; USD20 by early 2006, USD15 by 2008
Grass-root organization (MFI)	NO; reseller option (network operators transfers risk of providing service to marginal users) can be used
'Middle man' organization:	
■ Payment collection	NO; pre-paid approach circumvents this issue
■ selection of VPOs at village level	NO; pre-paid approach circumvents this issue
■ Training and handset provision	NO; can be undertaken by MFI
■ Coordination	YES, IF many organizations involved (e.g. Uganda)

Conclusions

- Perception that it is not economical to serve marginal customers is a myth
- Developmental & business goals are not incompatible
- The key to success & sustainability is to craft a solution that overcomes the relatively high transaction costs associated with serving marginal users
- There is no cookie-cutter approach to the problem of transaction costs (e.g. screening creditworthy users and preventing default); this study highlights 3 possible solutions:
  - The “Grameen” model
  - The pre-paid option
  - The re-seller approach